

EXHIBT 3

Part 1

Expert Witness Report

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I. Conclusions about the intelligent design creationist movement. My area of expertise is the nature and strategy of the intelligent design (ID) creationist movement. Based on the research I have done, I have concluded that its program is a fundamentally religious one. This conclusion is based primarily on ID leaders' and their supporters' views of it as stated in their own words. It is also based upon their total rejection of naturalism. Anti-naturalism is an integral part of ID. Its proponents reject not only philosophical naturalism (the metaphysical view that nothing exists beyond the natural world) but also the naturalistic methodology of science (the scientific procedural protocol of seeking only natural explanations of natural phenomena). ID's rejection of naturalism in any form logically entails its appeal to the only alternative, supernaturalism, as a putatively scientific explanation for natural phenomena. This makes ID a religious belief. In addition, my research reveals that ID is not science, but the newest variant of traditional American creationism. With only a few exceptions, it continues the usual complaints of creationists against the theory of evolution and comprises virtually all the elements of traditional creationism.

A. **“The Wedge Strategy.”** In this report, I refer frequently to a document entitled “The Wedge Strategy” that outlines the ID movement’s plan to promote mainstream acceptance of ID creationism and, subsequently, the teaching of ID in public school science classes.¹ The document states ID’s religious mission: “Design theory promises to reverse the stifling dominance of the materialist worldview, and to replace it with a science consonant with Christian and theistic convictions.” It also explains the short- and long-term goals of the Discovery Institute’s creationist subsidiary, established in 1996 as the Center for the Renewal of Science and Culture (CRSC) and now called the Center for Science and Culture (CSC). The goals are to be executed in three phases: **I. Research, Writing, and Publication; II. Publicity and Opinion-making; and III. Cultural Confrontation and Renewal.** The document provides the ID movement’s rationale for these goals. While this document is far from the only evidence of the religious commitments driving the ID movement, it stands out as the signature summary of the movement’s nature and strategy.

Known informally as the “Wedge Document” since it was posted on the Internet in February 1999, the Discovery Institute did not acknowledge ownership of it for three years.² When

¹ See Center for the Renewal of Science and Culture, “The Wedge Strategy,” on the Kansas Citizens for Science website at www.kcfs.org/Fliers_articles/Wedge.html. Accessed on March 31, 2005. This document formalizes the strategy being used by the Discovery Institute’s Center for Science and Culture to promote ID, outlining the ID movement’s goals over a twenty-year period.

² Chapter 2 of the book I co-authored with Paul R. Gross, *Creationism’s Trojan Horse: The Wedge of Intelligent Design* (Oxford University Press, 2004) (see II. C. 2. below), explains my authentication of this

interviewed about the document in March 1999, CRSC Senior Fellow Jay Wesley Richards discussed the phases of the strategy without addressing the document's authenticity, calling it an "older, summary overview of the 'Wedge' program."³ In June 2002, Discovery Institute President Bruce Chapman paradoxically referred to it as a 1998 fundraising tool but disavowed the program it outlines: "I don't disagree with it," Chapman said, "but it's not our program."⁴ However, six months later, in December 2002, CSC Program Director Stephen C. Meyer finally admitted ownership of the document by stating that it "was stolen from our offices and placed on the Web without permission."⁵

"The Wedge Strategy" opens with a lament over what ID creationists perceive as an attack on "the proposition that human beings are created in the image of God . . . one of the bedrock principles on which Western civilization was built."⁶ Charles Darwin, Karl Marx, and Sigmund Freud are blamed for promoting a "materialistic conception of reality [that] eventually infected virtually every area of our culture, from politics and economics to literature and art." This charge is followed by a vow to reverse these "devastating" cultural consequences and reinstate a properly religious view of the natural world:

Discovery Institute's Center for the Renewal of Science and Culture ***seeks nothing less than the overthrow of materialism and its cultural legacies.*** Bringing together leading scholars from the natural sciences and those from the humanities and social sciences, the Center explores how new developments in biology, physics and cognitive science raise serious doubts about scientific materialism and ***have re-opened the case for a broadly theistic understanding of nature.*** (emphasis added)

The strategy is compared to a wood-splitting wedge, with "the predominant materialist science" portrayed as a "giant tree" that must be split at its "weakest points." The 1991 book *Darwin on Trial* by Phillip Johnson, originator of the strategy, is designated as the "thin end of the wedge." The "theory of intelligent design" is explicitly invoked as "a positive scientific alternative to materialistic scientific theories" that will broaden the wedge and increase the momentum of the movement's attack on materialism. Then the Wedge Strategy will take a sectarian turn, replacing materialism with "***a science consonant with Christian and theistic convictions.***" (emphasis

document, which the Discovery Institute acknowledged publicly only after my published work appeared. See the Discovery Institute's response to ch. 2 in "The 'Wedge Document': So What?," on its website at www.discovery.org/scripts/viewDB/filesDB-download.php?id=109. Accessed on March 29, 2005. Scans of original Wedge Document on file with Barbara Forrest.

³ See James Still, "Discovery Institute's 'Wedge Project' Circulates Online," *Secular Web*, March 12, 1999, at www.infidels.org/secular_web/feature/1999/wedge.html. Accessed on March 26, 2005.

⁴ See Mindy Cameron, "Theory of 'Intelligent Design' Isn't Ready for Natural Selection," *Seattle Times*, June 3, 2002, B4. Available at Lexis-Nexis.

⁵ See Chris Mooney, "Survival of the Slickest," *American Prospect*, December 2, 2002, at www.prospect.org/print/V13/22/mooney-c.html. Accessed on March 26, 2005.

⁶ See "The Wedge Strategy."

added) Recognizing the need for support, the document affirms the strategy's Christian, evangelistic orientation:

Alongside a focus on influential opinion-makers, we also seek to build up a popular base of support among *our natural constituency, namely, Christians*. We will do this primarily through apologetics seminars. We intend these to *encourage and equip believers with new scientific evidences that support the faith*, as well as to "popularize" our ideas in the broader culture.⁷ (emphasis added)

The strategy includes "possible legal assistance" to counter resistance to the "integration of design theory into public school science curricula." The latter goal clearly confirms that the Discovery Institute wants ID to be taught in public schools.⁸

The Wedge Strategy includes twenty-year goals, one of which is "to see intelligent design theory permeate our religious, cultural, moral and political life." The more immediate, five-year (1998-2003) goals, which include promoting "the influence of design theory in spheres other than natural science," also include "spiritual & cultural renewal." Reflected in the center's original name, this goal requires making strategic inroads into the religious community:

- Mainline renewal movements begin to appropriate insights from design theory, and to repudiate theologies influences by materialism
 - Major Christian denomination(s) defend(s) traditional doctrine of creation & repudiate(s) Darwinism
 - Seminaries increasingly recognize & repudiate naturalistic presuppositions⁹
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⁷ Apologetics refers to the defense of Christianity from perceived attacks. See the definition below in this section.

⁸ CSC Associate Director John West denied this intent with respect to the Dover case: "Although we think discussion of intelligent design should not be prohibited, we don't think intelligent design should be required in public schools." See the December 14, 2004, Discovery Institute press release, "Discovery Calls Dover Evolution Policy Misguided, Calls for Its Withdrawal," at www.discovery.org/scripts/viewDB/index.php?command=view&program=CSC%20-%20Views%20and%20News&id=2341&callingPage=discoMainPage. Accessed on March 27, 2005. But see at IV. H. in this report ID leader William Dembski's proposal to teach ID and recruit high school students to the Wedge program even in the absence of scientific research to support ID.

⁹ See information on "mainline renewal movements" at ReligiousTolerance.org at www.religioustolerance.org/hom_pru7.htm: "The . . . Presbyterian Church (USA), the United Methodist Church, and other mainline denominations are quite heterogeneous. Their members reflect diverse points of view, from quite conservative Evangelicals to quite liberal beliefs. They contain renewal groups which are trying to return the denomination to an earlier state of doctrinal purity." Among some evangelical groups, renewal requires returning to what they perceive as America's original religious foundations. An example of such a group is the Center for Reclaiming America, established by D. James Kennedy, pastor of the Coral Ridge (Florida) Presbyterian Church. The center's program to "positively affect the culture and renew the vision of our Founding Fathers" includes "Promoting Creationism" and holding "Reclaiming America" conferences. See "About Us" at www.reclaimamerica.org/PAGES/AboutUs.asp. According to the *Christian Science Monitor*, a major theme of the 2005 conference was "taking back the schools, the media, the courts." See Jane Lampman, "For Evangelicals, a Bid to 'Reclaim America,'" *Christian Science Monitor*, March 16, 2005, at www.csmonitor.com/2005/0316/p16s01-

The intent to construct a support base of Christian constituents by means of apologetics seminars warrants special mention here. Since, like earlier forms of creationism, ID creationists' objections to evolution are religious, they see it as a problem requiring redress through religious measures. Accordingly, as the above reference shows, they have incorporated an apologetics program into the Wedge Strategy. Given the meaning of "apologetics," the intent to cultivate ID supporters through such seminars is additional confirmation that ID's Wedge Strategy is not only a religious but a sectarian Christian program. "Apologetics" is defined in the *Oxford English Dictionary*: "pl. or collect. sing. The defensive method of argument; often *spec.* The argumentative defence [sic] of Christianity." The Christian Research Institute, which has provided a great deal of publicity for the ID movement, defines apologetics this way: "Apologetics deals, first and foremost, with answering the outright denials of Christianity which are found in atheism and in other religions. But apologetics also deals first and foremost, with answering the outright denials of Christianity which are found primarily in the cults, as well as in some professing Christian groups within the Christian community itself. Thus, Christian apologetics must answer all challenges to the orthodox, biblical Christian faith—no matter who the challengers are."¹⁰

lire.htm. In 1999, the year the Wedge Document became public, Phillip Johnson (a Presbyterian himself) made a speech entitled "How the Evolution Debate Can Be Won" at Kennedy's "Reclaiming America for Christ" conference. His speech invokes clearly the guiding themes of both the conference and the Wedge Strategy:

I have built an intellectual movement in the universities and churches that we call "The Wedge," which is devoted to scholarship and writing that furthers this program of ***questioning the materialistic basis of science***. . . Now the way I see the logic of our [ID] movement going is like this. The first thing you understand is that the ***Darwinian theory isn't true***. . . When you realize that, the next question that occurs to you is, "Well, where might you get the truth?" When I preach from the Bible, as I often do at churches and on Sundays, I don't start with Genesis. I start with John 1:1, "In the beginning was the Word." In the beginning was intelligence, purpose and wisdom. The Bible had that right and the ***materialist scientists are deluding themselves***. . .

There are a lot of good things people can do. And the first one I'm going to say comes really straight out of the name of this conference—Reclaiming America For Christ. Throughout most of the 20th century the battle for Christianity has been a defensive battle; the initiative has been held by the atheists and agnostics—***the scientific materialist culture***. And the problem has been to hold on to some ***Christian culture***. Christianity has done very well with the heart, but it has lost the intellectual world. Well, it's time to go back and reclaim it. . .

. . . ***And so we're the ones who stand for good science***, objective reasoning, assumptions on the table, a high level of education, and freedom of conscience. . . That's what America stands for, and that's something we stand for, and that's something the Christian Church and the Christian Gospel stand for—the truth that makes you free. Let's recapture that, ***while we're recapturing America***. (emphasis added)

See Johnson's speech at www.coralridge.org/specialdocs/evolutiondebate.asp. Accessed on March 28, 2005. (Johnson's citation of the verse from John's Gospel as ID's foundation is discussed later in this report.)

¹⁰ For the *Oxford English Dictionary* definition, see <http://dictionary.oed.com/cgi/entry/50010378?>. Accessed on March 27, 2005. For the Christian Research Institute's definition, see "What Is Apologetics?" at www.equip.org/free/CP0100.htm. Accessed on March 27, 2005. Virtually all creationist publications can be considered part of a Christian apologetics program. Dean Kenyon's co-author for *Of Pandas and People*, Percival Davis, co-authored a 1983 creationist book entitled *A Case for Creation*. The back cover bears the word "Apologetics." Christian Leadership Ministries, a branch of Campus Crusade for Christ that has worked closely with the ID movement for over a decade, maintains an "Apologetics" page on its "Leadership University" website, where it provides virtual "offices" for ID proponents. This page, intended to assist Christians in their evangelistic efforts,

The CSC has established partnerships with other organizations in order to carry out the apologetics component of the Wedge Strategy. Among ID's most active supporters is the C. S. Lewis Society at Trinity College (formerly the Florida Bible Institute).¹¹ Run by ID proponent Thomas Woodward, the society promotes ID in its Christian apologetics program, which Woodward describes as "divided into two parts, General Apologetics and Intelligent Design."¹² Sponsors of its Apologetics.org website include the Foundation for Thought and Ethics (FTE), which holds the copyright to *Of Pandas and People*, and Access Research Network (ARN), a clearinghouse for ID materials.¹³ Promoting intelligent design creationism is an integral part of Woodward's Center for University Ministries, which distributes the ID film *Unlocking the Mystery of Life* and other "key science and general apologetics resources." (See a reference to this film in IV. A.) FTE founder Jon Buell, Charles Thaxton, and ID proponent Robert Kaita (another CSC fellow), are on the Board of Advisers.¹⁴ ID creationism thus has its origins in the religious apologetics of its creationist forebears and continues this tradition today.

The Wedge Document provides more detail about the strategy itself and the activities already carried out at that point in its execution, but the selected excerpts highlight the religious nature of the program. The document also leaves no doubt that ID proponents view intelligent design as the essential element in their plan to return to what they believe is the religious foundation of American culture. Yet despite the fact that "The Wedge Strategy" is replete with explicit references to intelligent design, CSC Associate Director John West recently denied in the *York Daily Record* that the document has anything to do with ID:

But in the [Dover] lawsuit, the Discovery Institute is mentioned as an organization that has promoted replacing the "theory of evolution in public classrooms with so called 'science' that is 'consonant with Christian and theistic convictions.'" West said the piece to which the suit referred came from a Discovery Institute fund-raising letter that had nothing to do with intelligent design.¹⁵

lists links to numerous articles by ID proponents such as William Dembski and Phillip Johnson. See "Apologetics" at www.leaderu.com/menus/apologetics.html. Accessed on March 8, 2005.

¹¹ See Trinity College's "Frequently Asked Questions" at www.trinitycollege.edu/index.php?option=content&task=section&id=6&Itemid=65. Accessed on March 7, 2005.

¹² See Tom Woodward and Dan Davis, "Skeptics Welcome Station," at www.apologetics.org/welcome.html. Accessed on March 7, 2005. Woodward also wrote a recent book about ID, *Doubts About Darwin: A History of Intelligent Design* (Baker Books, 2003).

¹³ See "Questions and Answers: The Apologetics FAQ," at www.apologetics.org/questions.html. Accessed on March 7, 2005.

¹⁴ See "The Center for University Ministries" at www.apologetics.org/trinity.html. Accessed on March 7, 2005. The roles of Charles Thaxton and the Foundation for Thought and Ethics in the ID movement are discussed in IV. A. and IV. C., respectively.

¹⁵ See Lauri Lebo, "Some Allies Question Dover Board's Policy," *York Daily Record*, December 19, 2004. On file with Barbara Forrest.

My research shows that the document has everything to do with intelligent design and that the Discovery Institute has pursued the strategy aggressively.

II. Professional qualifications. My professional background and expertise are relevant to this case as follows:

A. I earned a Ph.D. in philosophy from Tulane University in 1988. In my dissertation, "Naturalism in Education: A Study of Sidney Hook," I examined the influence of Hook's naturalism on his views concerning education.¹⁶ Hook recommended the adoption of the naturalistic methodology of science as the model of critical inquiry throughout the educational process. He was especially concerned that methods of critical inquiry be implemented throughout public education, which is tasked with educating the broadest segment of American society. He defended secular democracy as protective of the freedom necessary to the process of inquiry. His defense of public education was an aspect of his broader defense of public policy that advances the interests of secular society rather than sectarian religion.

B. My study of Sidney Hook makes the issue of ID creationism and its proponents' efforts to influence the teaching of science in public schools a natural one in which to employ my philosophical training. My scholarship on the subject of ID therefore reflects my interest in using that training to address issues in which philosophical, scientific, and public policy issues intersect. The question of whether ID should be taught in public schools involves important philosophical and public policy issues.

1. The first issue is whether the policies governing public education and other public institutions should reflect the theistic beliefs of policymakers and/or their constituents. This issue may be subdivided into its philosophical and constitutional aspects. The philosophical aspect concerns the epistemological issue of whether supernatural explanations can justifiably be invoked as explanations for natural phenomena. With respect to the issue of ID creationism, this question narrows to whether the supernatural can function as a principle of scientific explanation, as ID proponents assert, as opposed to science's well-established naturalistic methodology in which only natural explanations are sought in order to explain natural phenomena. The constitutional aspect of the issue concerns whether public policy may be constructed in ways that require recognition of theistic belief as a foundation of that policy.
2. Another issue is whether there is any parity or functional equivalence between the current naturalistic methodology of science and the "theistic science" that ID proponents claim can supplant it.
3. Yet another issue concerns the pedagogical implications of teaching ID in public school science classes. Public school science education properly requires the presentation of science as it reflects well-established, mainstream scientific practice. ID proponents contend that "alternative theories" should also be presented to students in order to

¹⁶ Barbara Carroll Forrest, "Naturalism in Education: A Study of Sidney Hook" (Ph.D. diss., Tulane University, 1988).

facilitate their development of the ability to engage in “critical analysis.” They also favor presenting evolutionary theory as scientifically controversial, a proposal to which they refer as “teaching the controversy.” The absence of scientific research to support ID and of the claimed controversy within science mitigates against these proposals.

4. In addition to the pedagogical concerns stemming from teaching ID in public school science classes, its theistic foundation raises serious constitutional questions. Given the government’s required neutrality in matters of religion, teaching ID poses a distinct threat to the constitutionally mandated separation of church and state.

C. Scholarly publications. I have written scholarly academic publications in which I establish the religious identity of ID and detail the ID movement’s execution of its Wedge Strategy. I have also written scholarly publications in which I discuss the philosophical and public policy issues related to teaching ID in public school science classes.

1. Barbara Forrest, “The Wedge at Work: How Intelligent Design Creationism Is Wedging Its Way into the Cultural and Academic Mainstream,” in *Intelligent Design Creationism and Its Critics: Philosophical, Theological, and Scientific Perspectives*, ed. Robert T. Pennock, MIT Press, 2001.¹⁷
2. Barbara Forrest and Paul R. Gross, *Creationism’s Trojan Horse: The Wedge of Intelligent Design*, Oxford University Press, 2004.¹⁸

This book is cited in the Brief Amicus Curiae filed by Georgia Citizens for Integrity in Science Education (GCISE), November 15, 2004, with the following signatories: Colorado Citizens for Science, Kansas Citizens for Science, Michigan Citizens for Science, Nebraska Religious Coalition for Science Education, New Mexico Academy of Science, New Mexicans for Science and Reason, New Mexico Coalition for Excellence in Science and Math Education, and Texas Citizens for Science. The brief was filed in support of plaintiffs in *Jeffrey Michael Selman, et al., Plaintiffs, v. Cobb County School District, et al., Defendants*, United States District Court, Northern District of Georgia, Atlanta Division.¹⁹

3. Barbara Forrest, “A Defense of Naturalism as a Defense of Secularism,” in *Sidney Hook Reconsidered*, ed. Matthew Cotter, Prometheus Books, 2004.²⁰

¹⁷ Available on the Talk Reason website at www.talkreason.org/articles/Wedge.cfm. Accessed on March 1, 2005.

¹⁸ See my website for this book at www.creationismstrojanhorse.com.

¹⁹ See the “Table of Authorities” in this brief at www.talkorigins.org/faqs/cobb/citizensforscience.html#authorities. Accessed on March 3, 2005.

²⁰ Available at www.creationismstrojanhorse.com/Defense_of_Naturalism.pdf.

4. Barbara Forrest, Review of *Darwinism, Design and Public Education*, by John Angus Campbell and Stephen C. Meyer, eds., *Integrative and Comparative Biology* 44:510-513 (2004).²¹
5. Steven Gey, Matthew Brauer, and Barbara Forrest, "Is It Science Yet? Intelligent Design Creationism and the Constitution," *Washington University Law Quarterly*, upcoming spring 2005.²²
6. Barbara Forrest and Paul R. Gross, "The Wedge of Intelligent Design: Retrograde Science, Schooling, and Society," in *Scientific Values and Civic Virtues*, ed. Noretta Koertge, Oxford University Press, forthcoming June 2005.²³
7. Barbara Forrest, "Teaching the Scientific and Philosophical Foundations of Evolution: Learning the Lay of the Religious and Political Land," forthcoming in a book compiled by the Biological Sciences Curriculum Study (BSCS), based on presentations by participants in the American Institute of Biological Sciences' Special Symposium, *Evolutionary Science and Society: Educating a New Generation*, annual meeting, National Association of Biology Teachers, November 2004.

The following are additional scholarly publications discussing issues relevant to ID.

8. Barbara Forrest, "Methodological Naturalism and Philosophical Naturalism: Clarifying the Connection," *Philo*, Fall–Winter 2000.²⁴
9. Barbara Forrest, "The Possibility of Meaning in Human Evolution," *Zygon*, December 2000.

D. Non-academic Publications. I have also written non-academic publications about the ID issue.

1. Barbara Forrest, "The Newest Evolution of Creationism," *Natural History* (April 2002): 80.²⁵

²¹ Available at www.findarticles.com/p/articles/mi_qa4054/is_200412/ai_n9520516/print. Accessed on March 29, 2005.

²² Available as FSU [Florida State University] College of Law, Public Law Research Paper No. 125, Social Science Research Network, at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=590882. Accessed on March 29, 2005.

²³ See the web page for this book on the Oxford University Press website at www.oup.com/us/catalog/general/subject/Philosophy/Science/?view=usa&ci=0195172248. Accessed on March 3, 2005.

²⁴ Available at www.creationismstrojanhorse.com/ForrestPhilo.pdf. Accessed on March 3, 2005.

2. Barbara Forrest and Paul R. Gross, "Intelligent Design Has Distinctly Evolutionary Nature," *Science and Theology News*, December 2004.²⁶
3. Barbara Forrest and Glenn Branch, "Wedging Creationism into the Academy," *Academe*, American Association of University Professors, January-February 2005, 36.²⁷
4. Barbara Forrest, "Intelligent Design: Creationism's Trojan Horse, A Conversation with Barbara Forrest," *Church & State*, Americans United for Separation of Church and State, February 2005.²⁸

E. Other involvement with ID issues.

At the request of their authors, I reviewed the following Wexler article manuscript and the Pigliucci book manuscript.

1. Jay D. Wexler, "Darwin, Design, and Disestablishment: Teaching the Evolution Controversy in Public Schools," *Vanderbilt Law Review* 56 (2003): 751-855.
2. Massimo Pigliucci, *Denying Evolution: Creationism, Scientism, and the Nature of Science*, Sinauer Associates, 2002.

I have given numerous lectures and presentations about the ID issue, of which the following are representative:

3. "Neo-Creationism: Where's the Harm in That?" Evolution and God Conference, Case Western Reserve University, October 2004.²⁹
4. Special Symposium, *Evolutionary Science and Society: Educating a New Generation*, panel discussant at meeting of the American Institute of Biological Sciences and National Association of Biology Teachers, November 2004.³⁰

²⁵ Available at www.creationismstrojanhorse.com/NaturalHistory.pdf. Accessed on March 3, 2005.

²⁶ Available on the *Science and Theology News* website at www.stnews.org/archives/2004_december/books_authors_1204.html. Accessed on March 3, 2005.

²⁷ Available on the AAUP website at www.aaup.org/publications/Academe/2005/05jf/05jfforr.htm. Accessed on March 3, 2005.

²⁸ A longer version of this interview was published as a "Special Preview" on the Americans United website at www.au.org/site/PageServer?pagename=cs_2005_02_special. Accessed on March 3, 2005.

²⁹ See the conference web page at www.princehouse.homestead.com/schedule.html. Accessed on March 3, 2005.

³⁰ See the AIBS website at www.aibs.org/special-symposia/2004.html. Accessed on March 3, 2005.

5. "Creationism Lite," panel discussant at meeting of the American Anthropological Association, December 2004.
6. "Inside Creationism's Trojan Horse: A Closer Look at Intelligent Design," invited Darwin Day presentation at the University of Evansville, Evansville, Indiana, February 21, 2005.³¹

Based on my knowledge of the history of the ID movement's Wedge Strategy, the execution of that strategy, and the religious identity of ID, I have provided assistance to state and local pro-science organizations. I assisted Ravalli County Citizens for Science in Darby, Montana, during their efforts to reverse a policy adopted by their local school board supporting the teaching of ID in local high school science classes. I also assisted Ohio Citizens for Science during their efforts, first, to keep ID out of their state science standards and, second, to prevent the adoption of a creationist lesson plan based on a benchmark in the science standards. I have at various times helped other people working to protect either the teaching of science in their public schools (e.g., Burlington, WA) or their state science standards (e.g., Georgia).

Because of my involvement in and knowledge of the ID issue, I am also currently a member of the National Center for Science Education's Board of Directors. My activities promoting the separation of church and state resulted in my selection as a member of the National Advisory Council for Americans United for Separation of Church and State.

III. Methodology used in research and publication on ID.

A. Research goal. In my publications on the issue of ID creationism, my goal has been to present a comprehensive explanation, based on empirical research, of the nature of the ID movement and its "Wedge Strategy" for promoting ID both in public schools and, more comprehensively, in American culture. This explanation has included identifying ID as an extension of traditional creationism by showing the continuity between ID and earlier forms of creationism such as "scientific creationism" and "progressive creationism." It has further included establishing the identity of ID as a fundamentally religious movement that employs political means to advance its religious ends.³²

B. Guiding research principles. The principle guiding my research and publication is the use of primary source data as much as possible; the best data are statements made by the leaders of the ID movement at the Discovery Institute's Center for Science and Culture, who, in reference to their "Wedge Strategy," refer to themselves collectively as "the Wedge." I therefore rely chiefly upon the Wedge leaders' own descriptions of their movement and of its motives and goals, using direct quotes by leading ID proponents at every opportunity. Statements by the ID

³¹ See "UE Darwin Day to Discuss Intelligent Design," in "News and Events," February 15, 2005, University of Evansville website, at www.evansville.edu/aboutue/news.asp?ArticleID=506. Accessed on March 29, 2005.

³² See ch. 9 of *Creationism's Trojan Horse*, which presents the evidence for both of these aspects of the ID movement. See also Gey, Brauer, and Forrest, "Is It Science Yet? Intelligent Design Creationism and the Constitution" at note 22. See also Forrest and Gross, "The Wedge of Intelligent Design: Retrograde Science, Schooling, and Society" (forthcoming June 2005) at note 23.

movement's leaders are the best evidence of the nature of ID, the Wedge Strategy's goals, and ID proponents' activities to execute the strategy. Wedge leaders have made numerous statements, both written and verbal, revealing the religious essence of ID, and I have made extensive use of such statements. Since no one in the ID movement has produced original scientific research in its support, Wedge leaders' public statements and publications constitute the substance of ID. I also use statements by their allies and supporters.

Another principle guiding my research is to analyze ID proponents' terminology and the conceptual framework within which they explain both ID and their strategy. For example, I have documented the ways in which ID proponents have strategically modified their terminology over the last few years; for example, they often substitute the term "objective origins" for "intelligent design." I have also analyzed the concepts that ID proponents employ in their promotion of ID and their defense of its putative scientific legitimacy. Their rejection of scientific naturalism and promotion of ID as a "non-natural" alternative to evolutionary theory logically entails their promotion of supernaturalism, which is the only alternative to naturalism.

C. Primary sources for ID proponents' statements about the nature of ID, their strategy and goals, and their execution of the strategy. Since I rely primarily upon Wedge leaders' own statements as much as possible, my primary sources of ID proponents' statements about the nature of ID, their strategy and goals, and their execution of the strategy are their own writings, publicity materials, and other primary information sources. ID proponents have written numerous books describing both ID and their strategy. I have used documents such as articles by William Dembski, which he posts on his website.³³ In order to document the absence of articles using ID as a biological theory in peer-reviewed, scientific journals, I searched scientific databases such as Medline, Zoological Record, etc.

I also obtain data from the websites of the Discovery Institute (DI) and its creationist subsidiary, the Center for Science and Culture (CSC), William Dembski's International Society for Complexity, Information, and Design (ISCID), and auxiliary ID organizations such as Access Research Network (ARN) and the Intelligent Design Network (IDnet), both of which work very closely with the CSC. ID proponents use these websites to post press releases, commentaries, letters, articles, policy statements, etc. These are often useful in following the ID movement's political activities. For example, the Discovery Institute posted a May 8, 2000, press release announcing its congressional briefing for U.S. senators, congressmen, and staffers.³⁴ DI has also posted a great deal of information about the "Santorum amendment," a sense of the Senate

³³ See William A. Dembski, "Design Inference Website," at www.designinference.com. Accessed on March 29, 2005.

³⁴ On file with Barbara Forrest. DI news releases are not retained on its website. This one is archived in Lexis-Nexis (load date May 8, 2000).

resolution that Phillip Johnson wrote and that Sen. Rick Santorum attempted to insert into the No Child Left Behind Act in 2001.³⁵

Wedge members give numerous lectures and speeches, which are often available as audio files. They make frequent radio appearances, and the programs are often accessible via the Internet. I have used both recordings and transcripts of speeches and radio appearances by Wedge members. They are often interviewed by magazines that post the interviews on the Internet. Wedge members have both organized and participated in numerous ID conferences, which are publicized on the Internet, often on special web pages created for these conferences. I have used audiotapes and transcripts of ID leaders' conference presentations, as well as the published conference proceedings when those are available. Other relevant sources of statements by ID proponents include media coverage in newspapers and magazines, interviews with ID leaders on radio programs and in magazines, audio recordings, and videotapes featuring ID leaders and their supporters.

Among the most important sources of primary data are those which show the ID movement's religious alliances and associations. For example, all of the CSC's major funding sources are religious. The *Discovery Institute Journal*, formerly published on the DI website, announced the sources and amounts of funding for its Center for the Renewal of Science and Culture.³⁶ In addition, Wedge members have been interviewed by and have appeared with high-profile religious figures such as James Dobson of Focus on the Family and D. James Kennedy of Coral Ridge Ministries.³⁷ They are frequent speakers at churches and religious meetings. I have obtained evidence of these associations from radio and magazine interviews as well as the websites of the ID movement's religious allies. Focus on the Family's website sells ID materials such as videotapes, and FOF co-published the ID videotape *Unlocking the Mystery of Life*. This tape was also promoted as an "evangelistic tool" by the U. S. Center for World Mission.³⁸

D. My secondary sources of information about ID's religious goals and creationist identity are publications and statements by other creationists. Such information is available from the websites of the ID movement's religious associates and allies such as Focus on the Family. Focus on the Family, for example, has published pro-ID articles in its *Citizen* magazine. Churches and other groups that sponsor lectures and conferences featuring Wedge members frequently post this information on the Internet. An example is information posted by the

³⁵ See "Key Resources for Parents and School Board Members" on the Discovery Institute's Center for Science and Culture website at www.discovery.org/csc/. See hyperlink to "Santorum Language in the No Child Left Behind Act Conference Report" on this page. Accessed on March 3, 2005.

³⁶ See *Creationism's Trojan Horse*, pp. 148-50, 267.

³⁷ See *Creationism's Trojan Horse*, ch. 9.

³⁸ See Focus on the Family's promotional web page for the videotape at www.family.org/resources/itempg.cfm?itemid=3042. See the U. S. Center for World Mission's promotion for in their *Mission Frontiers* magazine at www.cesame-nm.org/announcement/Unlocking_Mystery.pdf. Accessed on March 29, 2005.

Rivendell Institute in New Haven, CT, regarding a November 2000 ID conference at Yale University. A conference brochure was available on the website.³⁹

IV. Basis for conclusions (see I above).

A. Historical background on the development of ID creationism. The legal challenges to the teaching of evolution began with the 1925 Scopes trial. Since then, the courts have issued at least nine major rulings relating to the religiously based efforts of creationists to curtail the teaching of evolution: *Epperson v. Arkansas*, 1968; *Segraves v. State of California*, 1981; *McLean v. Arkansas Board of Education*, 1982; *Edwards v. Aguillard*, 1987; *Webster v. New Lenox School District*, 1990; *Peloza v. Capistrano School District*, 1994; *Freiler v. Tangipahoa Parish Board of Education*, 1997; *Rodney LeVake v. Independent School District 656, et al.*; and *Selman et al. v. Cobb County School District et al.*, 2005.⁴⁰

These challenges all stemmed from religious objections by creationists to the teaching of evolution and have been consistently unsuccessful in light of creationism's essentially religious nature. A popular creationist book written by P. William Davis, the co-author of *Of Pandas and People*, stated almost forty years ago that "it is an illusion to suppose that the problems which evolutionary doctrine raises for Christians are well under control. . . . To underestimate it and its impact is dangerous."⁴¹ ID creationists still share this estimation. Charging in the Wedge Document that "the proposition that human beings are created in the image of God" came under "wholesale attack" by "thinkers such as Charles Darwin," they conclude that "The cultural consequences of this triumph of materialism were devastating." They vow to seek "nothing less than the overthrow of materialism and its cultural legacies."⁴²

Although the Wedge Strategy (see I. A.) was developed in the wake of *Edwards*, ID creationism itself predates *Edwards*.⁴³ It is a direct outgrowth of the progressive creationism (PC) of the early 1980s. Progressive creationists accept scientific data that establish the age of the earth as several billion years, but they believe that God created all living things and periodically

³⁹ On file with Barbara Forrest.

⁴⁰ See Molleen Matsumura, *Eight Major Court Decisions Against Teaching Creationism as Science*, National Center for Science Education, February 2001, at www.ncseweb.org/resources/articles/3747_8_major_court_decisions_against_2_15_2001.asp. See *Selman et al. v. Cobb County School District et al.*, at www.gand.uscourts.gov/documents/02cv2325ord.pdf. Accessed on March 29, 2005.

⁴¹ See Wayne Frair and P. William Davis, *The Case for Creation* (Chicago: Moody Press, 1967), 7. P. William Davis is Percival Davis, as pointed out later in this report.

⁴² See "The Wedge Strategy."

⁴³ See Eugenie C. Scott, *Evolution vs. Creationism: An Introduction* (Westport, CT: Greenwood Press, 2004), 116: "'Intelligent Design' (ID) refers to a movement that began a few years before the *Edwards* decision and solidified in the few years after it."

intervenes in the workings of nature.⁴⁴ In a 1984 article entitled “The Trustworthiness of Scripture in Areas Relating to Natural Science,” ID proponent and CSC fellow Walter Bradley, a progressive creationist, asserts that God works through both natural processes and miraculous interventions in the natural process. Stressing the need to respect biblical constraints in the interpretation of scientific data, Bradley frames his argument within the requirements of apologetics:

The progressive creationist sees God working . . . through a combination of miracle plus [natural] process. . . . The goal is to first define the latitude of permissible interpretation of the biblical account of origins. Then God’s revelation of his world as perceived through the eyes of science will be used to identify the best possible interpretation of origins within the previously prescribed boundary. This methodology allows the authoritative position of Scripture to be maintained while taking advantage of insights from scientific studies to supplement our understanding where the Genesis 1 account is ambiguous.⁴⁵

Bradley’s remark about the ambiguity of the Genesis creation account is a reference primarily to the creationist debate about the age of the earth. Bradley, like other progressive creationists, accepts the scientific data produced by the modern earth sciences. Characterized by its acceptance of the earth’s age as several billion years, PC is therefore a form of “old-earth” creationism (OEC). Although the ID movement includes “young-earth” creationists such as Nancy Pearcey and Paul Nelson, most ID creationists are old-earth creationists.⁴⁶ However, ID’s explicit emphasis on “intelligent design” as a putatively scientific explanation for natural phenomena can be traced to young-earth creationism (YEC). In 1967, YECs Wayne Frair and P. [Percival] William Davis attributed phylogenetic similarities to “a *common creative plan* or design according to which basic organisms were created.”⁴⁷ In 1978, YEC Richard Bliss, explaining “creative design,” wrote that “the designer for [all life and life processes]” was “the God of creation.”⁴⁸ By 1988, Bliss was using the term “intelligent design,” asserting that “while

⁴⁴ See Scott’s discussion of PC in *Evolution vs. Creationism*, 62.

⁴⁵ See Walter L. Bradley and Roger Olsen, “The Trustworthiness of Scripture in Areas Relating to Natural Science,” at www.origins.org/articles/bradley_trustworthiness.html. Accessed on March 7, 2005. Bradley is listed as one of the “Critical Reviewers” in the 1989 and 1993 editions of *Of Pandas and People*. See p. iii of both editions.

⁴⁶ For information on ID’s continuity with progressive creationism, see Forrest and Gross, *Creationism’s Trojan Horse*, pp. 276-280. See also Eugenie C. Scott, *Evolution vs. Creationism* (Greenwood Press, 2004), pp. 61-64.

⁴⁷ See Wayne Frair and P. William Davis, *The Case for Creation: An Evaluation of Modern Evolutionary Thought from a Biblical Perspective* (Chicago: Moody Press, 1967), 24. This book is an earlier edition of *A Case for Creation*, the 1983 book Frair and Davis co-authored (see note 10).

⁴⁸ See Richard Bliss, *Origins: Two Models: Evolution [and] Creation* (San Diego: Creation-Life Publishers, 1978), 3.

evolutionists are trying to find non-intelligent ways for life to occur, the creationist insists that an intelligent design must have been there in the first place.”⁴⁹

According to ID leader William Dembski, “The Intelligent Design movement begins with the work of Charles Thaxton, Walter Bradley, Michael Denton, Dean Kenyon, and Phillip Johnson.”⁵⁰ Dembski cites as a seminal ID publication Thaxton’s 1984 book, *The Mystery of Life’s Origin* where, arguing for “Special Creation by a Creator beyond the cosmos,” Thaxton asserts that “Special Creation . . . [holds] that the *source which produced* life was intelligent.”⁵¹ (emphasis in original) Dean Kenyon, co-author of the ID textbook *Of Pandas and People* (see IV. C.), is a biologist who rejected evolutionary theory in favor of creationism and in 1984 endorsed Thaxton’s book by writing the foreword. In an article written the same year entitled “The Creationist View of Biologic Origins,” Kenyon states that a “creationist view of origins . . . is to be preferred over the evolutionary view” and that “biomolecular systems require intelligent design and engineering know-how.” In 1986, Kenyon filed an affidavit in the *Edwards* case making the same affirmation. He also stated that “creation-science and evolution are the sole scientific alternative explanations” of the presence of plants and animals on Earth.⁵² In 1987, the

⁴⁹ See Richard Bliss, *Origins: Creation or Evolution* (El Cajon, CA: Master Books, 1988), 14.

⁵⁰ See William Dembski, “The Intelligent Design Movement,” *Cosmic Pursuit* (Spring 1998). Accessed at www.arn.org/docs/dembski/wd_idmovement.htm on March 7, 2005. See also Scott, *Evolution v. Creationism*, 116-117. In a recent magazine interview, Phillip Johnson names A. E. Wilder-Smith as the first “‘prophet’ who anticipated the intelligent design (ID) movement.” See “Interview: The Measure of Design: A Conversation About the Past, Present, and Future of Darwinism and Design,” *Touchstone*, July-August 2004, 60. The late Wilder-Smith was a young-earth creationist. See a website devoted to Wilder-Smith at www.wildersmith.org/. See also Dean Kenyon’s testimonial on Wilder-Smith at www.wildersmith.org/testimonials.htm. See also Wilder-Smith’s inclusion in Henry Morris’s “A Young-Earth Creationist Bibliography,” at www.icr.org/pubs/imp/imp-269.htm. Accessed on March 8, 2005.

⁵¹ See Charles Thaxton, *The Mystery of Life’s Origins: Reassessing Current Theories* (Foundation for Thought and Ethics, 1984; second printing September 1992), 200. According to Wedge member Nancy Pearcey, ID’s roots in Thaxton’s work go all the way back to the 1970s, when Thaxton had a crisis of faith.

The design movement had its birth in the early 1970s, in a tiny French-speaking village perched on the snowy peaks of the Swiss Alps. At Francis Schaeffer’s ministry “L’Abri,” Charles Thaxton, fresh from a doctoral program in chemistry, wrestled with the implications of his faith. Did life begin in a chemical soup? “Criticisms of origin-of-life theories were showing up in the scientific literature,” Charles told *World*. “But I kept thinking of the [Bible] verse, ‘Overcome evil with good.’ I felt Christians should offer a positive alternative.” That alternative was intelligent design.

See Nancy Pearcey, “Opening the ‘Big Tent’ in Science: The New Design Movement.” Access Research Network (1999) (first printed as “The Evolution Backlash,” *World* (March 1, 1997), at www.arn.org/docs/pearcey/np_bigtent30197.htm. Accessed on March 9, 2005.

⁵² See Kenyon’s foreword in Thaxton, *The Mystery of Life’s Origins*, v-viii. See also Dean H. Kenyon, “The Creationist View of Biologic Origins,” *NEXA Journal*, San Francisco State University (Spring 1984): 28, 31. Kenyon’s citation for the “engineering know-how” comment is YEC A. E. Wilder-Smith (see note 50). See also “Affidavit of Dr. Dean H. Kenyon in Biology and Bio-Chemistry,” in *Don Aguillard, et al., Plaintiffs, v. Edwin W. Edwards, et al., defendants* (1986), 60, 69. In 1982, Kenyon wrote the foreword to *What Is Creation Science?* by YECs Henry Morris and Gary Parker. He states there that in 1976 he wrote a section for YECs John Whitcomb and

U.S. Supreme Court ruled against teaching creation science in public schools in *Edwards v. Aguillard*. Also in 1987, Berkeley law professor Phillip Johnson decided to begin his anti-evolution effort after his religious conversion. In the early 1990s, with a group of supporters, he developed ID's "Wedge Strategy" to defeat evolution.⁵³ Johnson says that the Wedge movement began in 1992 at a conference at Southern Methodist University.⁵⁴ In 1993, he held another conference entitled "The Darwinian Paradigm: Problems and Prospect" in Pajaro Dunes, California, which Kenyon attended.⁵⁵ By 1995, according to Johnson, Kenyon had become a "proponent of 'intelligent design' as an explanation for life's inherent complexity, which is to say he argued, without necessarily endorsing a literal reading of the Genesis account, that a preexisting supernatural intelligence probably had to have been involved in some way."⁵⁶ Kenyon also has a major role in the 2004 ID film, *Unlocking the Mystery of Life*.⁵⁷

In 1996, when the Discovery Institute, a Seattle think tank, established the Center for the Renewal of Science and Culture (CRSC) to promote ID through execution of the Wedge Strategy, Johnson became (and remains) its advisor. Kenyon was among its first fellows, an association he still maintains, as does Thaxton.⁵⁸

B. Post-*Edwards* promotion of ID creationism. Although *Edwards v. Aguillard* outlawed creationism in public school science classes, Phillip Johnson and his Wedge associates have promoted ID aggressively. But since this effort began in the immediate wake of *Edwards*, the Wedge had to adjust its strategy accordingly. Paul Nelson, a founding Wedge member, explains

Henry Morris's *The Genesis Flood* (1961), and followed that later with a section for Wilder-Smith's *The Creation of Life* (1970). He also affirms in the 1982 foreword that he no longer accepted the pro-evolution arguments he made in his own book, *Biochemical Predestination* (1969). See Dean Kenyon, foreword to *What Is Creation Science?* by Henry M. Morris and Gary Parker (San Diego, CA: Creation-Life Publishers, 1982). Writing in a YEC publication, George F. Howe refers to Kenyon as "an example of an evolutionist who . . . converted to creationism." See "Origins and Education: A Primer," *Creation Matters* (July/August 1999), 6, at www.creationresearch.org/creation_matters/99/cm9907.html#Origins_and_Education. Accessed on March 7, 2005.

⁵³ See Forrest and Gross, *Creationism's Trojan Horse*, ch. 1.

⁵⁴ See Phillip E. Johnson, "The Wedge: Breaking the Modernist Monopoly on Science," *Touchstone* (July/August 1999), 18. The conference was entitled "Darwinism: Scientific Inference or Philosophical Preference?" See the roster of attendees and presentations at www.leaderu.com/orgs/fte/darwinism/. Accessed on March 8, 2005.

⁵⁵ Walter Bradley also attended. For a partial roster of attendees at the Pajaro Dunes conference, see Paul Nelson and Jonathan Wells, "Is Common Descent an Axiom of Biology?" at www.leaderu.com/orgs/arn/nelson/pn_darwinianparadigm061593.htm. Accessed on March 7, 2005.

⁵⁶ See Phillip E. Johnson, *Reason in the Balance: The Case Against Naturalism in Science, Law, and Education* (Downers Grove, IL: InterVarsity Press, 1995), 29.

⁵⁷ See a promotion for the film listing Kenyon as a participant at www.arn.org/arnproducts/videos/v026.htm. Accessed on March 7, 2005.

⁵⁸ See the 1996-97 roster of fellows at <http://web.archive.org/web/19961102121141/www.discovery.org/assocfellows.html>. See the current roster at www.discovery.org/csc/fellows.php. Accessed on March 7, 2005.

how this was done. In *Christian Research Journal* (2002), Nelson points out that “the demographics of dissent from neo-Darwinian evolution have changed dramatically.” Affirming that “creationists have sought throughout the twentieth century . . . an open-ended debate about the truth of Darwinian evolution,” he announces that the debate “has now arrived in the emergence of the ‘intelligent design’ (ID) movement.”⁵⁹ Noting that “one can no longer accurately characterize dissenters from Darwinian evolution strictly as ‘young-earth’ creationists,” Nelson recounts “the history of this shift,” giving Johnson most of the credit for bringing it about. He also advises his readers that although “life in the ‘big tent’ of the intelligent design community certainly requires a period of acclimation,” Christians, particularly “traditional creationists,” should “welcome their new ID surroundings.” (The “big tent” refers to Johnson’s effort to build a coalition of YECs and ID proponents in order to promote ID. Wedge member Nancy Pearcey calls it “the ‘big tent’ for the evangelical world.”⁶⁰)

Nelson pinpoints *Edwards* as a pivotal ruling for creationists: “The year 1987 marks a noteworthy turning point in the American debate over the science and philosophy of origins. In that year, a long cultural battle that had begun more than a quarter century earlier (with [YECs] Henry Morris and John Whitcomb’s classic *The Genesis Flood* in 1961) appeared to many onlookers to have come decisively to an end when the *Edwards v. Aguillard* decision of the U.S. Supreme Court declared ‘creation-science’ to be a religious belief.” Nelson recalls that, at the time, *Edwards* “seemed to shut the door permanently on creationism,” and “the ‘two-model’ approach to the origins controversy was now dead.”⁶¹ But although “*Edwards* had seemingly ended the public debate over origins,” the issue was not dead: “A revolution from an unexpected quarter . . . was about to occur.”⁶² Johnson revived the creationism issue by shifting the focus of the debate.

According to Nelson, the books Johnson read after his conversion convinced him that “the ostensible issues of *Edwards v. Aguillard* were not the real issues” and that “the creationists in Louisiana never had a chance” because of “the way ‘science’ was defined.”⁶³ Moreover, reading

⁵⁹ See Paul Nelson, “Life in the Big Tent: Traditional Creationism and the Intelligent Design Community,” *Christian Research Journal* 24 (2002), Christian Research Institute, at www.equip.org/free/DL303.htm. Accessed on March 8, 2005.

⁶⁰ Pearcey, “Opening the ‘Big Tent’ in Science.”

⁶¹ See Nelson, “Life in the Big Tent.” See also historian of science John Lynch’s “Timeline” which lists “some of the major events in the interaction between evolutionary and creationist worldviews” at <http://web.archive.org/web/20030422152348/http://jmlynch.myftp.org/classes/origins/summer/timeline.php>. Accessed on March 7, 2005. Lynch points out that *Edwards v. Aguillard* (1987) “probably marks the end of Young Earth Creationism as a potent force.”

⁶² See Nelson, “Life in the Big Tent.”

⁶³ Nelson says that while on sabbatical in England in 1987, Johnson read Richard Dawkins’ *The Blind Watchmaker*, considered a classic popular explanation of evolutionary theory, and Michael Denton’s *Evolution: A Theory in Crisis*, another book that Dembski cites as one with which the ID movement begins. (See Dembski, “The Intelligent Design Movement” at note 50 and accompanying text.) Geneticist Philip T. Spieth places Denton’s book

the *amicus* briefs filed in *Edwards*, including the National Academy of Sciences brief, Johnson decided that scientists' definition of science as naturalistic meant that "advocates of supernatural creation may neither argue for their own position nor dispute the claims of the scientific establishment."⁶⁴ (Johnson's objection to defining science as naturalistic reveals his preference for a definition that either explicitly or implicitly includes the supernatural.) Johnson decided that the real issue was neither "the literal truth of Genesis nor the merits of 'creation science,'" but rather "*whether there could be, even in principle, any evidence against Darwinian evolution or in favor of design by an intelligence.*"⁶⁵ (emphasis in original) In short, according to Nelson, Johnson simply rejected the accepted definition of science: "Definitions of science, [Johnson] argued, could be contrived to exclude any conclusion we dislike or to include any we favor."⁶⁶

Johnson subsequently made this argument in *Darwin on Trial* (1991), which "provided the philosophical core for a research community that had already begun to form in the 1980s around such books as [Charles Thaxton's] *The Mystery of Life's Origin*." (This book, as noted above, argues for "special creation.") His Pajaro Dunes conference, which included YECs, emphasized that the "admission price" to his new movement was "minimal: *one need only allow for the possibility of design.*" (emphasis in original) Johnson calls his minimalist creationism "mere creation," which Wedge member and YEC John Mark Reynolds calls "the counterpart in science to C.S. Lewis's notion of 'mere Christianity': the common ground uniting all orthodox Christians."⁶⁷ This is a central aspect of how the Wedge has promoted ID in the post-*Edwards* era.

C. Publication of *Of Pandas and People*. In fall 1981, the creationist newsletter *Origins Research* carried a short story announcing that "A high school biology textbook is in the planning stages that will be sensitively written to 'present both evolution and creation while limiting discussion to scientific data.'"⁶⁸ The announcement is clearly a reference to the book

in the "'creation science' genre." See Spieth's review in the June 1987 issue of *Zygon* at www.ncseweb.org/resources/articles/2245_review_of_michael_denton39s_6_1_1987.asp. Accessed on March 8, 2005.

⁶⁴ See the National Academy of Sciences' definition of science in its *amicus* brief at www.soc.umn.edu/~samaha/cases/edwards_v_aguillard_NAC.html. Accessed on March 8, 2005.

⁶⁵ See Nelson, "Life in the Big Tent."

⁶⁶ See Johnson's elaboration on his objections to the naturalistic definition of science in "Evolution as Dogma: The Establishment of Naturalism," Foundation for Thought and Ethics (1990), at www.arn.org/docs/johnson/pjdogma1.htm. Accessed on March 9, 2005. Michael Behe, a biochemist and founding Wedge member, clearly favors a definition of science that permits supernatural explanations: "The philosophical argument (made by some theists) that science should avoid theories which smack of the supernatural is an artificial restriction on science. Their fear that supernatural explanation would overwhelm science is unfounded." See Michael J. Behe, *Darwin's Black Box* (New York: Simon and Schuster, 1996), 251.

⁶⁷ See Pearcey, "Opening the 'Big Tent' in Science."

⁶⁸ "Unbiased Biology Textbook Planned," *Origins Research* (Fall 1981). On file with the National Center for Science Education. This was the newsletter of a student creationist group, Students for Origins Research, and is the ancestor of the ID publication *Origins and Design*. See the *OR* archive at Access Research Network at

first published in 1989 as *Of Pandas and People*, the ID movement's first (and only) secondary school textbook. Creationist Charles Thaxton, whose work William Dembski credits as foundational to the ID movement (see IV. A.), would be the science advisor. Thaxton's place of contact was the Foundation for Thought and Ethics, which holds the copyright to *Pandas* and to Thaxton's 1984 book, *The Mystery of Life's Origin*. The author would be "a teaching biologist with two McGraw-Hill books in print," a reference to P. William Davis, co-author of two earlier YEC books (see notes 10 and 47). He co-authored *Pandas* as Percival Davis.⁶⁹ In a 1994 newspaper article about *Pandas*, Davis admitted his religious motives for writing it: "Of course my motives were religious. There's no question about it."⁷⁰

Davis's *Pandas* co-author was Dean H. Kenyon, the scientific creationist who became an ID proponent following the *Edwards* decision (see IV. A. at n. 52 and accompanying text). As stated above, Kenyon's view was that there were only two alternatives: creation-science and evolution. The fact that *Pandas*, a book promoting ID, was in the works prior to Kenyon's submission of his 1986 affidavit and was published shortly thereafter suggests that for Kenyon, there is no meaningful distinction between creation-science and ID. A 1994 review of *Pandas* in the YEC *Creation Research Society Quarterly* by Wayne Frair, Davis's co-author on two earlier YEC books, certainly makes no distinction:

Two main prongs of the creationist movement are (1) emphasis upon a supernatural creator GOD and (2) the concept of separate unrelated created types (kinds) of plants and animals. The *Pandas* book strongly supports the latter with good science. With its stress upon intelligent design using good science, the book points in the direction of the former in a way that is acceptable in public schools and in a religiously neutral scientific community.⁷¹

Indeed, *Pandas* contains unmistakable similarities not only to Kenyon's earlier creationist views, spelled out in his 1986 affidavit of support for the defendants in *Aguillard v. Edwards* (1986), but also to other earlier creationist publications. There are numerous threads of continuity connecting the earlier creationist work, Kenyon's views, *Pandas*, and other ID publications; this continuity includes both tactical and content similarities. Examples include the following (with emphasis added):

1. Creationists commonly claim for tactical reasons that support for their position is increasing.

www.arn.org/orpages/or.htm. See also the Fall 1981 table of contents at www.arn.org/orpages/orindex.htm#4.2. See also Forrest and Gross, *Creationism's Trojan Horse*, 176-77, 347 n104.

⁶⁹ See John A. Thomas, "The Foundation for Thought and Ethics," *NCSE Reports* (July-August 1990), 18-19, at www.ncseweb.org/resources/articles/7781_36_thomas_1990_the_founda_11_23_2004.asp. Accessed on March 10, 2005.

⁷⁰ See Erik Larson, "Darwinian Struggle," *Wall Street Journal*, November 14, 1994, A1. Available through ProQuest.

⁷¹ See Wayne Frair, review of *Of Pandas and People*, by Percival Davis and Dean H. Kenyon, *Creation Research Society Quarterly* 31 (1994): 61.

Institute for Creation Research (YEC) (1980): “Today there are thousands of scientists who are creationists and who repudiate any form of evolution in their analysis and use of scientific data. Creationist scientists can now be found in literally every discipline of science and *their numbers are increasing rapidly.*”⁷²

Kenyon affidavit (1986): “Although students generally hear only one side on the origins question, *increasing numbers of scientists* are now abandoning evolution for a new scientific version of creationism. Creationist scientists now number in the hundreds, possibly in the thousands, in the States and other countries.”⁷³

Discovery Institute’s Center for Science and Culture, “Top Questions [on ID]” (2004): “Since Discovery Institute first published its statement of dissent from Darwin in 2001, more than 300 scientists have courageously stepped forward and signed onto a *growing list of scientists* of all disciplines voicing their skepticism over the central tenets of Darwin’s theory of evolution.”⁷⁴

Of Pandas and People (1993): “*Pandas* gives students a much-needed opportunity to explore the evidence and arguments that have caused some scientists to doubt contemporary Darwinism. . . . *Pandas* helps students understand the case for intelligent design. Following *a growing number of scientists* and philosophers, the authors argue that life not only *appears* to have been intelligently designed but that it actually was.”⁷⁵

2. Creationists reject natural explanations of such things as the origin of life.

Henry Morris, ed., Scientific Creationism (1974) (YEC): “Creationists believe that this continued emphasis on the naturalistic or artificial production of living organisms is highly misleading. *None of these phenomena would ever occur under natural conditions.* . . . There is no [sic] slightest *scientific* evidence that life can come from non-life. The creation model emphasizes the unique origin of life, at the creative word of a *living* Creator.”⁷⁶

Kenyon affidavit (1986): “Until such evidence [that life on earth could have begun spontaneously by purely chemical and physical means] is forthcoming, *one certainly*

⁷² See “The ICR Scientists,” *Impact* (August 1980), Institute for Creation Research, at www.icr.org/pubs/imp/imp-086.htm. Accessed on March 14 2005.

⁷³ See Kenyon, “Affidavit,” 61-62.

⁷⁴ See Center for Science and Culture, “Top Questions,” at www.discovery.org/csc/topQuestions.php. Accessed on March 14, 2005.

⁷⁵ See Mark D. Hartwig and Stephen C. Meyer, “A Note to Teachers,” in Percival Davis and Dean H. Kenyon, *Of Pandas and People* (Dallas, TX: Haughton Publishing Co., 1993), 157.

⁷⁶ See Henry M. Morris, ed., *Scientific Creationism* (Public School Edition), (San Diego, CA: Creation-Life Publishers, 1974), 50-51.

cannot claim that the possibility of a naturalistic origin of life has been demonstrated.”⁷⁷

ID proponent William Dembski, *Intelligent Design: The Bridge Between Science and Theology* (1999): “Indeed the following problems have proven *utterly intractable not only for the mutation-selection mechanism but also for any other undirected natural process proposed to date: the origin of life*, the origin of the genetic code, the origin of multicellular life, . . .”⁷⁸

Of Pandas and People (1993): “Many who accept intelligent design as the best theory of life origins also believe that observations show *natural processes are inadequate to account for the appearance of major types of living things.*”⁷⁹

3. Creationists assert that life appears abruptly, without biological precursors, in the geological record, implying divine intervention in the production of these life forms.

Henry Morris, *Scientific Creationism* (1974): “All orders and families (as well as kingdoms, phyla and classes) *appear suddenly in the fossil record*, with no indication of transitional forms from earlier types.”⁸⁰

Kenyon affidavit (1986): “Creation-science means origin through *abrupt appearance in complex form*, . . . [M]ost fossil forms *appear abruptly* in the record, remain essentially unchanged for millions of years . . . and then abruptly disappear. . . . This extraordinary situation directly supports creation-science.”⁸¹

Stephen C. Meyer, P. [Paul] A. Nelson, and Paul Chien, “The Cambrian Explosion: Biology’s Big Bang” (2001): “First, as the name implies, the fossils of the Cambrian explosion *appear suddenly or abruptly* within a very brief period of geologic time. . . . Finally the theory of intelligent design also explains both the *sudden appearance* of the animal body plans in the Cambrian and the absence of ancestral precursors in the pre-Cambrian.”⁸²

⁷⁷ See Kenyon, “Affidavit,” 68.

⁷⁸ See William A. Dembski, *Intelligent Design: The Bridge Between Science and Theology* (Downers Grove, IL: InterVarsity Press, 1999), 113.

⁷⁹ See Percival Davis and Dean H. Kenyon, *Of Pandas and People* (Dallas, TX: Haughton Publishing Co., 1993), 41-42.

⁸⁰ See Morris, *Scientific Creationism*, 79.

⁸¹ See Kenyon, “Affidavit,” 61, 64.

⁸² See Stephen C. Meyer, P. A. Nelson, and Paul Chien, “The Cambrian Explosion: Biology’s Big Bang,” 2, 42, at www.discovery.org/articleFiles/PDFs/Cambrian.pdf. Accessed on March 29, 2005. This is an ID publication.

Of Pandas and People (1993): “There is a virtual ‘explosion’ of life forms recorded in the rocks at the beginning of the Cambrian [period]. Any theory of the origin and development of life must explain how such a dramatic range of body plans made the *early, abrupt appearance* they did.”⁸³

Pandas actually defines intelligent design as “*abrupt appearance*”: “Darwinists object to the view of intelligent design because it does not give a natural cause explanation of how the various forms of life started in the first place. *Intelligent design means that various forms of life began abruptly through an intelligent agency*, with their distinctive features already intact—fish with fins and scales, birds with feathers, beaks, and wings, etc.”⁸⁴

These are only a few examples of the uninterrupted line of descent from young-earth creationism, to Kenyon’s creation-science, and finally to ID as represented in *Pandas* and other writings by ID proponents.

William Dembski calls *Pandas* a “transitional text” that “began examining what a design-theoretic alternative to evolutionary theory would look like.”⁸⁵ Wedge member and young-earth-creationist Nancy Pearcey, who wrote the “Overview” in *Pandas*, credits the book for helping to fuel the “resurgence of controversies in education.”⁸⁶ Pearcey’s observation reflects *Pandas’* continuation of the creationist tradition of writing textbooks that challenge the primacy of evolutionary theory. Correspondingly, *Pandas* bears distinct evidence of its creationist ancestry. For example, YEC Richard Bliss, in *Origins: Creation or Evolution*, refers to a “Master Designer”: “Creationists predict that the further scientists explore the more their studies will reveal symmetry, order and interdependence . . . evidence for a Master Designer.”⁸⁷ *Pandas*, in both the 1989 and 1993 editions, refers to a “master intellect”: “This parallel [between the structure of informational molecules (DNA, protein) and our universal experience that such sequences are the result of intelligent causes] strongly suggests that life itself owes its origin to a

Nelson has already been identified as a member of the Wedge. Stephen C. Meyer and Paul Chien are discussed below at IV. F, where there is also more information on this paper.

⁸³ See Davis and Kenyon, *Of Pandas and People*, 22.

⁸⁴ See Davis and Kenyon, *Of Pandas and People*, 99-100. This rejection of natural causation and the assertion of abrupt appearance amounts to a definition of ID as the instantaneous creation of life by divine intervention. Compare this to YEC Richard Bliss’s 1988 definition of “creative design”: “*Creative design or abrupt appearance submodel*—all life and life processes were designed to function just as we observe them today. Life appeared quickly on the scene. The designer for all of this was the God of creation. The Creator not only created and designed life but also gave purpose to it.” (emphasis added) See Bliss, *Origins*, 9.

⁸⁵ See Dembski, “The Intelligent Design Movement.” See the extensive list of resources on *Pandas* at the National Center for Science Education at www.ncseweb.org/article.asp?category=21. Accessed on March 15, 2005.

⁸⁶ See Pearcey, “Opening the ‘Big Tent’ in Science.”

⁸⁷ See Bliss, *Origins*, 33.

master intellect.”⁸⁸ But there is also an undisguised disclosure of *Pandas*’ creationist content on p. ix of both the 1989 and 1993 editions, where there is an explicit justification for teaching “creation”: “Recently the U.S. Supreme Court made it clear that teachers have the right to present non-evolutionary views in their classrooms. This is significant, since a survey of high school biology teachers in Ohio at about the same time showed that roughly one fifth were already presenting *the idea of creation* in their science classes, and a quarter of the teachers surveyed believed that the subject should be included in science classrooms.”⁸⁹ (emphasis added) This statement in *Pandas* is a direct reference to *Edwards*, citing it to claim that teaching *creationism* is legal.

According to its introduction, *Pandas* presents “a favorable case for intelligent design.”⁹⁰ The Foundation for Thought and Ethics holds the copyright to *Pandas*, and “Haughton Publishing Co.” appears to be a name assumed by the Dallas, TX, agricultural publishing firm Horticultural Printers, Inc., for the purpose of publishing *Pandas*. According to an article about FTE by John A. Thomas, Haughton had published no previous books and employed neither writers nor science advisors, leading Thomas to conclude that “*Pandas* is entirely the creation of FTE.”⁹¹ According to a document apparently included with IRS materials related to FTE’s articles of incorporation, the Foundation for Thought and Ethics was established “to introduce Biblical perspective into the mainstream of America’s humanistic society, confronting the secular thought of modern man with the truth of God’s word.”⁹² This document also refers to the plans for *Pandas*:

Nearing completion, our first project is a rigorous scientific critique of the theory of pre-biotic evolution. *Next, we will develop a two-model high school biology textbook that will fairly and impartially give scientific evidences for creation side by side with evolution.* (In this case, Scripture or even religious doctrine would violate the separation of church and state.) A credentialed author team and a consulting editorial board of scholars are being

⁸⁸ See Percival Davis and Dean H. Kenyon, *Of Pandas and People* (Dallas: Haughton Publishing Company, 1989), 58; and Percival Davis and Dean H. Kenyon, *Of Pandas and People* (Dallas: Haughton Publishing Company, 1993), 58.

⁸⁹ This reference is to data in Michael Zimmerman, “The Evolution-Creation Controversy: Opinions of Ohio High School Biology Teachers,” *Ohio Journal of Science* 87 (1987): 115-25. *Pandas* selectively emphasizes the minority of teachers who favored teaching creationism. An abstract of the article points out that the great majority of the Ohio teachers in the survey favored teaching evolution rather than creationism: “Ohio high school biology teachers are far more likely to support the teaching of evolution, and far less likely to support the teaching of creationism than is the public at large. . . . Teachers favoring religion and prayer in the public schools are significantly more likely to teach creationism in their biology courses than those opposed.” See the abstract at www.skepticfiles.org/evo2/ohiosrvy.htm. Accessed on March 17, 2005.

⁹⁰ See Davis and Kenyon, *Of Pandas and People*, ix.

⁹¹ See Thomas, “The Foundation for Thought and Ethics,” 18.

⁹² See “What Is the Foundation for Thought and Ethics?” ca. 1980. On file with the National Center for Science Education.

assembled for the project. The manuscript will be placed with a secular publisher for publication. (emphasis added)

Besides the obvious use of the word “creation” above, a number of things in this reference to *Pandas* (FTE’s only high-school textbook of this kind) mark it as a creationist book. First, “two-model” is a clear reference to creationism (see Paul Nelson’s use of this term in IV. B.) Second, the plural “evidences” is commonly (though not exclusively) used in Christian apologetics, of which creationism is an integral part (see I. A.). (A lawyer for the plaintiffs in *Edwards* noted the repeated use of this term in the 1981 Louisiana Balanced Treatment for Creation-Science and Evolution-Science Act.)⁹³ Moreover, the phrase “in this case” indicates FTE’s attempt to avoid constitutional problems with this particular book, suggesting a covertly religious aim. There is evidence that this is the case. In a 1994 *Wall Street Journal* article, Erik Larson reports that Johnson was disappointed that *Pandas* authors had to conceal the identity of the designer:

To counter objections that “Pandas” would bring religion into the classroom, the [Foundation for Thought and Ethics] suggested a response [to be used by the book’s promoters]: “I agree that personal beliefs should not be taught in science classrooms, but intelligent design is not a personal belief; it is accepted science, a view that is held by many highly qualified scientists.”

But even Mr. Johnson, the Berkeley law professor, says a bit more candor about the nature of the designer might be in order. “You’re playing Hamlet without Hamlet if you don’t say something about that,” he says. He exonerates the authors, however. “The fact is they’re working against enormous prejudice here, and enormous bigotry. And they’re trying to put it in terms that the courts and science will allow to exist.”⁹⁴

The stated intent to use a secular publisher points to FTE’s identity as a religious organization. FTE’s articles of incorporation describe its primary purpose as “both religious and educational, which includes, but is not limited to, proclaiming, publishing, preaching, teaching, promoting, broadcasting, disseminating, and otherwise making known the Christian gospel and understanding of the Bible and the light it sheds on the academic and social issues of our day.”⁹⁵

There is also evidence that *Pandas* was understood by its creators as a creationist book even before a publisher was secured. Originally intended for publication under the title *Biology and Origins*, FTE president Jon Buell wrote a January 1987 letter to Jones and Bartlett Publishers soliciting interest in the manuscript. Referring to the book’s potential profits, Buell made the following pitch, which includes a reference to the anticipated *Edwards v. Aguillard* ruling:

⁹³ See Douglas Theobald, “Evidences?” at www.talkorigins.org/faqs/comdesc/evidences.html. Accessed on March 9, 2005.

⁹⁴ See Larson, “Darwinian Struggle.”

⁹⁵ See “Articles of Incorporation of the Foundation for Thought and Ethics,” filed in the Office of the Secretary of State of Texas, December 5, 1980. On file with the National Center for Science Education.

The enclosed projections showing revenues of over 6.5 million [dollars] in five years are based upon modest expectations for the market provided the U. S. Supreme Court does not uphold the Louisiana "Balanced Treatment Act." *If, by chance it should uphold it, then you can throw out these projections, the nationwide market would be explosive!*⁹⁶ (emphasis added)

The *Edwards* case had been argued on December 10, 1986, shortly before Buell wrote the letter, and he was basing the book's estimated profits on the outcome. The notable aspect of his projection is that he clearly believed that higher profits depended on a ruling favorable to creationists. Awaiting the ruling (which was handed down a few months later on June 19, 1987), Buell is saying that the upholding of the Louisiana law, which required that creation science be taught in a public school whenever evolution was taught, would create an "explosive" market for the textbook that would be published three years later as *Of Pandas and People*. If the Louisiana creationists won, so would *Pandas*. This is tantamount to an admission that *Pandas* is a creationist textbook.⁹⁷

There is also more evidence of the religious intent of *Pandas*. A 1992 FTE fundraising letter from Buell cites the upcoming 1993 edition of *Pandas* as an example of what FTE was doing to "help restore uncoerced moral and spiritual choice to young people." Citing the transfer of political power that year, Buell invokes a biblical story about the transfer of loyalty from King Saul to David and stresses the need to "'understand the times, with knowledge of what Israel should do' (I Chron. 12:32)." Buell offers *Pandas* as the source of such knowledge. Requesting financial support to help "oppose the tide of naturalism and atheism" in public schools, he assures donors that they will be making it possible for public school students to "learn the truth about how our world was made, and to appreciate the fact that they are not just animals."⁹⁸

⁹⁶ See the letter from Jon Buell to Arthur C. Bartlett, Jones and Bartlett Publishers, Inc., January 30, 1987. On file with the National Center for Science Education. The letter refers to the book as *Biology and Origins*. Buell's December 1988 letter announcing the publication of the manuscript by Haughton Publishing explains the name change to *Of Pandas and People*. This letter is also on file with the National Center for Science Education.

⁹⁷ See the Court's decision in *Edwards v. Aguillard* (1987) at <http://caselaw.lp.findlaw.com/cgi-bin/getcase.pl?court=us&vol=482&invol=578>. Accessed on March 31, 2005.

⁹⁸ See letter from Jon A. Buell, Foundation for Thought and Ethics, December 1992. On file with the National Center for Science Education.